



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

AMERICAN STATISTICAL ASSOCIATION.

NEW SERIES, No. 53.

MARCH, 1901.

INDUSTRIAL CONSOLIDATIONS IN THE UNITED STATES.

BY LUTHER CONANT, JR., S.B.,

EDITOR "INDUSTRIAL SECURITIES," "THE JOURNAL OF COMMERCE AND COMMERCIAL BULLETIN," N. Y.

It is hardly necessary to say that in the preparation of this brief article upon consolidations in the United States there is no intention of introducing into these publications any argument either in favor of or against the so-called trusts. On the contrary, it is attempted merely to present in condensed form, as an intelligent basis for investigation, some elementary data of the "consolidation movement," particularly its proportions from year to year, and roughly its relations to general conditions with a view to suggesting a few of the chief causes and influences bearing upon it. For this purpose the following compilation has been prepared, showing in detail and also in chronological order the organization of industrial consolidations in the United States. The term "industrial" is used in its narrower Wall Street sense, to the exclusion of the large number of consolidations formed in the railway world, street railways, gas and electric lighting and similar fields. Only companies having a capitalization of \$1,000,000 or more have been considered. The figures given are of authorized and not issued capitalization, as the

latter is much the more subject to change. Division is made into preferred stock, common stock and bonds, the last named including debentures, where such have been employed. As one of the chief features of the table is its comparison year by year, the original capital of the respective companies has in nearly every case been given, indicating subsequent increases later, as such increases obviously should be considered as a part of the total capitalization in the years when made; reductions in authorized capitalization have also been indicated.

It may be said that in most cases the issued capitalization of the companies given does not vary widely from the amounts authorized. Among the conspicuous exceptions are the Illinois Steel Company, which issued only about \$18,000,000 of its \$50,000,000 capital stock; the Federal Steel Company, which retains about half its \$200,000,000 of stock in its Treasury; the American Brass Company, which has issued but \$8,000,000 of its \$20,000,000 authorized stock; the Distilling Company of America, the issued stocks of which amount to roughly \$77,000,000 against an authorized total of \$125,000,000; and the Rubber Goods Manufacturing Company, which has unissued in its Treasury about one half its \$50,000,000 capital. Following is the list in detail:—

Year when Incorporated.	AUTHORIZED CAPITALIZATION.		
	Stock.		
Previous to 1887.	Preferred.	Common.	Bonds.
American Screw Co., 1860 . . .	\$. . .	\$3,250,000	\$. . .
d Standard Oil Trust, 1872 . . .	. . .	97,250,000	. . .
x Westinghouse Electric & Mfg. Co., 1872	4,000,000	6,000,000	. . .
x Union Switch & Signal Co., 1882	500,000	1,000,000	500,000
d American Cotton Oil Trust, 1884	. . .	40,000,000	. . .
d National Linseed Oil Trust, 1885	. . .	18,000,000	. . .
Total . . .	\$4,500,000	\$165,500,000	\$500,000

FOOTNOTE.—The sign *x* indicates that the capitalization was increased later, *z* that it was reduced; *d* denotes that the item is duplicated later in the list (see appendix); *r* denotes that company was reorganized; *b* indicates 1st and 2d preferred stock, *u* underlying bonds, *y* part underlying bonds and part direct issues.

Year when Incorporated.	AUTHORIZED CAPITALIZATION.		
	Preferred.	Common.	Stock.
1887.			
<i>z</i> Southern Cotton Oil Co.	\$	\$5,000,000	\$
<i>xd</i> National Cordage Co.	5,000,000	10,000,000	. . . .
<i>zd</i> National Lead Trust . . . . .	. . . . .	90,000,000	. . . .
Pacific Coast Borax Co.	1,000,000	1,500,000	. . . .
<i>d</i> Sugar Refineries, The (trust) . .	. . . . .	50,000,000	. . . .
Safety Car Heating and Lighting Co. . . . .	. . . . .	5,000,000	. . . .
<i>rd</i> National Linseed Oil Co. . . . .	. . . . .	18,000,000	. . . .
<i>d</i> Distilling & Cattle Feeding Trust . .	. . . . .	30,726,000	. . . .
Total, 1887	\$6,000,000	\$210,226,000	
1888.			
<i>x</i> Electric Storage Battery Co.	\$5,000,000	\$8,500,000	\$450,000
New York Breweries Co.	1,500,000	1,500,000	1,650,000
Tidewater Oil Co. . . . .	. . . . .	5,000,000	. . . .
Total, 1888	\$6,500,000	\$15,000,000	\$2,100,000
1889.			
American Cotton Oil Co.	\$15,000,000	\$20,237,100	\$5,000,000
“ Axe & Tool Co., . . . . .	. . . . .	3,872,500	. . . .
<i>x</i> Diamond Match Co. . . . .	. . . . .	7,500,000	. . . .
<i>d</i> Illinois Steel Co. . . . .	. . . . .	50,000,000	13,200,000
Indianapolis Breweries Ltd.	665,000	665,000	800,000
American Pipe Mfg. Co. . . . .	. . . . .	1,000,000	. . . .
Chicago Breweries Ltd. . . . .	. . . . .	3,000,000	2,000,000
<i>z</i> Consolidated Car Heating and Lighting Co. . . . .	. . . . .	2,500,000	. . . .
Denver United Breweries Co.	1,000,000	1,000,000	1,000,000
Western Stone Co. . . . .	. . . . .	2,000,000	500,000
American Strawboard Co. . . . .	. . . . .	6,000,000	1,250,000
St. Louis Breweries Ltd.	4,500,000	4,500,000	5,000,000
Total, 1889	\$21,155,000	\$102,274,600	\$28,750,000
1890.			
¹ <i>d</i> American Biscuit & Mfg. Co.	\$	\$9,000,000	<i>a</i> \$545,000
“ Book Co. . . . .	. . . . .	5,000,000	. . . .
<i>x</i> “ Tobacco Co.	14,000,000	15,000,000	. . . .
“ Mfg. Co. (bagging) . . . . .	. . . . .	3,111,500	. . . .
“ Shot & Lead Co. . . . .	. . . . .	3,000,000	. . . .

a, Amount issued; 1, incorporation of these companies was not confirmed.

Year when Incorporated.	AUTHORIZED CAPITALIZATION.		
	Preferred.	Common.	Stock.
1890.—Continued.			
Celluloid Co.	\$. . .	\$6,000,000	\$. . .
Chicago Junction Railways and Union Stock Yards	6,500,000	5,500,000	13,000,000
rd Distilling & Cattle Feeding Co. . . .	. . .	35,000,000	. . .
rd National Starch Mfg. Co. . .	b 5,500,000	5,000,000	4,500,000
r " Harrow Co. . . .	. . .	2,000,000	. . .
d New York Biscuit Co. . . .	. . .	10,000,000	1,500,000
8r United States Book Co. . .	2,000,000	2,000,000	1,000,000
1d United States Baking Co. . .	. . .	5,000,000	. . .
Total, 1890, . . .	\$28,000,000	\$106,611,500	\$20,545,000
1891.			
American Cereal Co.	\$. . .	\$3,400,000	\$1,550,000
x " Sugar Refining Co. . .	25,000,000	25,000,000	. . .
z " Lithographic Co. . .	3,500,000	8,500,000	. . .
" Wringer Co. . . .	350,000	1,650,000	. . .
" Soda Fountain Co. . .	b 2,500,000	1,250,000	. . .
" Steel Casting Co. . .	1,350,000	2,850,000	. . .
r Atlas Tack Co. . . . .	. . .	700,000	300,000
d Consolidated Steel and Wire Co. . . .	. . .	4,000,000	. . .
International Elevating Co. . . .	. . .	2,200,000	. . .
x National Casket Co. . . . .	. . .	3,000,000	. . .
d " Tube Works Co. . .	5,750,000	5,750,000	. . .
" Lead Co.,	15,000,000	15,000,000	. . .
z " Rice Milling Co. . .	2,000,000	3,000,000	. . .
United States Glass Co. . . .	. . .	5,000,000	. . .
" " Printing Co. . . .	. . .	3,500,000	. . .
Yellow Pine Co.	900,000	1,200,000	. . .
Pittsburg Plate Glass Co. . . .	150,000	9,850,000	. . .
Total . . .	\$56,500,000	\$95,850,000	\$1,850,000
x American Tobacco Co. (increase) . . .	. . .	6,000,000	. . .
d National Cordage Co. " . . .	. . .	. . .	6,000,000
Grand total, 1891 . . .	\$56,500,000	\$101,850,000	\$7,850,000
1892.			
z American Typefounders Co. . .	\$4,000,000	\$5,000,000	\$. . .
x Colorado Fuel & Iron Co. . . .	2,000,000	11,000,000	6,500,000
z General Electric Co.	4,252,000	30,460,000	. . .
rd Hecker-Jones-Jewell Milling Co. . .	3,000,000	2,000,000	2,500,000
rd Herring-Hall-Marvin Co. . . .	1,500,000	1,800,000	. . .

3, Company dissolved owing to failure of reorganization plan.

<i>Year when Incorporated.</i>	AUTHORIZED CAPITALIZATION.		
	<i>Stock.</i>	<i>Preferred.</i>	<i>Common.</i>
1892.—Continued.			
<i>d</i> Michigan Peninsular Car Co. . .		\$5,000,000	\$3,000,000
<i>c</i> National Wall Paper Co. . .			30,000,000
New York Wire Cloth Co. . .		400,000	600,000
Trenton Potteries Co. . .		1,250,000	1,750,000
United States Rubber Co. . .		25,000,000	25,000,000
Total . . .		\$46,402,000	\$110,610,000
American Sugar Refining Co. (increase)		12,500,000	12,500,000
Western Stone Co. (increase) . .			250,000
Grand Total, 1892 . . .		\$58,902,000	\$123,360,000
1893.			
International Pulp Co. . . .		\$2,000,000	\$3,000,000
Lake Superior Consolidated Iron Mines			30,000,000
<i>d</i> Manhattan Spirit Co. . . .			5,000,000
<i>rd</i> United States Cordage Co. . .		14,000,000	20,000,000
United States Leather Co. . .		64,000,000	64,000,000
Union Typewriter Co. . .		<i>b</i> 8,015,000	10,000,000
		\$88,015,000	\$132,000,000
<i>x</i> Diamond Match Co. (increase) . .			1,500,000
Total, 1893, . . .		\$88,015,000	\$133,500,000
1894.			
<i>d</i> Carnegie Steel Co., Ltd. . .		\$. . .	\$25,000,000
<i>x</i> American Glue Co. . .		1,000,000	1,400,000
<i>d</i> National Linseed Oil Co. (increase) . .			3,000,000
Total, 1894, . . .		\$1,000,000	\$26,400,000
1895.			
<i>d</i> American Spirits Mfg. Co. . .		\$7,000,000	\$28,000,000
<i>d</i> Consolidated Ice Co. . . .		3,500,000	6,500,000
<i>r</i> Brooklyn Wharf & Warehouse Co. .		<i>b</i> 7,500,000	5,000,000
<i>r</i> Pennsylvania Steel Co. . .		1,500,000	5,000,000
<i>x</i> Virginia Carolina Chemical Co. .		2,500,000	4,000,000
<i>d</i> Welsbach Commercial Co. . .		3,500,000	3,500,000
<i>x</i> Diamond Match Co. (increase) . .			2,000,000
Total, 1895, . . .		\$25,500,000	\$54,000,000
			\$27,755,000

c, Company dissolved in 1900. The original capital was only \$14,000,000 but no record of the dates of increase obtained.

Year when Incorporated.	AUTHORIZED CAPITALIZATION.		
	Preferred.	Common.	Bonds.
1896.			
American Electric Heating Corporation.	\$. . .	\$10,000,000	\$500,000
Central Fireworks Co.	1,750,000	1,750,000	· · ·
<i>x</i> Pure Oil Co.		1,000,000	· · ·
<i>d</i> Spirits Distributing Co.	<i>b</i> 3,675,000	3,675,000	· · ·
Standard Rope & Twine Co.		12,000,000	10,500,000
Westinghouse Electric & Mfg. Co. (increase)		5,000,000	· · ·
Total, 1896,	\$5,425,000	\$33,425,000	\$11,000,000
1897.			
<i>x</i> American Malting Co.	\$15,000,000	\$15,000,000	\$. . .
<i>r</i> " Wood Working Machinery Co.	2,000,000	2,000,000	2,000,000
Glucose Sugar Refining Co.	14,000,000	26,000,000	· · ·
<i>dx</i> Shelby Tube Co.		5,000,000	· · ·
Total, 1897,	\$31,000,000	\$48,000,000	\$2,000,000
1898.			
American Linseed Co.	\$16,750,000	\$16,750,000	\$. . .
<i>dr</i> " Fisheries Co.	2,000,000	8,000,000	· · ·
<i>d</i> " Steel & Wire Co. of Ill.	12,000,000	12,000,000	· · ·
" Tin Plate Co.	20,000,000	30,000,000	· · ·
" Thread Co.	6,000,000	6,000,000	6,000,000
<i>d</i> Atlantic Snuff Co.		10,000,000	· · ·
Cleveland & Sandusky Brewing Co.	3,000,000	3,000,000	6,000,000
<i>x</i> Continental Tobacco Co.	37,500,000	37,500,000	· · ·
Federal Steel Co.	100,000,000	100,000,000	<i>u</i> 26,600,000
International Paper Co.	25,000,000	20,000,000	10,000,000
" Silver Co.	9,000,000	11,000,000	4,500,000
Knickerbocker Ice Co. (Chicago)	3,000,000	4,000,000	2,000,000
Maryland Brewing Co.	3,250,000	3,250,000	7,500,000
<i>r</i> National Shear Co.	1,500,000	1,500,000	· · ·
" Biscuit Co.	25,000,000	30,000,000	<i>u</i> 1,800,000
<i>d</i> Standard Distilling & Distributing Co.	8,000,000	16,000,000	· · ·
<i>d</i> Union Tobacco Co.	12,000,000	12,000,000	· · ·
United States Envelope Co.	3,750,000	1,000,000	2,000,000
United Breweries Co. (Chicago)		5,600,000	3,500,000
Otis Elevator Co.	4,500,000	6,500,000	· · ·
	\$289,250,000	\$334,100,000	\$69,900,000

Year when Incorporated.	AUTHORIZED CAPITALIZATION.		
	Preferred.	Stock.	Bonds.
1898.—Continued.			
INCREASES			
Union Switch & Signal Co.	\$	\$	\$500,000
United States Rubber Co. . . . .	. . . . .	. . . . .	u 5,000,000
Virginia-Carolina Chemical Co. . . . .	. . . . .	k 5,500,000	. . .
Westinghouse Electric & Mfg. Co. . . . .	. . . . .	. . . . .	y 4,350,000
Grand Total, 1898,	\$289,250,000	\$339,600,000	\$79,750,000
1899.			
Alabama & Georgia Consolidated			
Coal & Iron Co.	\$650,000	\$650,000	\$
d American Saddle Co.	800,000	1,000,000	. . . .
“ School Furniture Co.	5,000,000	5,000,000	. . . .
“ Brass Co. . . . .	. . . . .	20,000,000	. . . .
“ Steel and Wire Co.	40,000,000	50,000,000	. . . .
“ Radiator Co.	5,000,000	5,000,000	. . . .
“ Car & Foundry Co.	30,000,000	30,000,000	. . . .
“ Ice Co.	30,000,000	30,000,000	. . . .
“ Woolen Co.	25,000,000	40,000,000	. . . .
“ Felt Co.	2,500,000	2,500,000	500,000
“ Shipbuilding Co.	15,000,000	15,000,000	. . . .
“ Beet Sugar Co.	5,000,000	15,000,000	. . . .
Amalgamated Copper Co. . . . .	. . . . .	75,000,000	. . . .
American Steel Hoop Co.	14,000,000	19,000,000	. . . .
“ Smelting & Refining Co.	32,500,000	32,500,000	. . . .
“ Bicycle Co.	10,000,000	20,000,000	20,000,000
“ Hide & Leather Co.	17,500,000	17,500,000	10,000,000
“ Agricultural Chemical Co.	20,000,000	20,000,000	. . . .
d Asphalt Company of America . . . . .	. . . . .	30,000,000	5 30,000,000
Atlantic Clay Co.	1,000,000	2,000,000	. . . .
American Grass Twine Co. . . . .	. . . . .	15,000,000	. . . .
“ Pastry & Mfg. Co.	1,000,000	2,000,000	. . . .
“ Writing Paper Co.	12,500,000	12,000,000	17,000,000
“ Chicle Co.	3,000,000	6,000,000	. . . .
“ Pneumatic Service Co.	5,000,000	10,000,000	. . . .
Alabama Cons. Coal & Iron Co.	2,500,000	2,500,000	. . . .
American Iron & Steel Co.	3,000,000	17,000,000	. . . .
“ Cement Co. . . . .	. . . . .	2,100,000	1,000,000
“ Window Glass Co.	4,000,000	13,000,000	. . . .
Baltimore Brick Co.	900,000	1,200,000	1,500,000
d Columbia Electric Car Lighting & Brake Co. . . . .	. . . . .	10,000,000	. . . .
k, Common and preferred.			
5, Trust certificates issued against stock held in trust.			

Year when Incorporated.	AUTHORIZED CAPITALIZATION.		
	Preferred.	Common.	Bonds.
1899.—Continued.			
Consolidated Rubber Tire Co. . .	\$5,000,000	\$5,000,000	\$. . .
California Fruit Packers' Association . . .		2,500,000	. . .
Consolidated Lake Superior Co. . .	6,000,000	14,000,000	. . .
Continental Cotton Oil Co. . .	3,000,000	3,000,000	. . .
Central Foundry Co. . .	7,000,000	7,000,000	4,000,000
⁴ Distilling Company of America .	55,000,000	70,000,000	<i>u</i> 1,899,000
Empire Steel & Iron Co. . .	2,500,000	2,500,000	. . .
Electric Boat Co. . .	5,000,000	5,000,000	. . .
General Chemical Co. . .	12,500,000	12,500,000	. . .
Great Lakes Towing Co. . .	2,500,000	2,500,000	. . .
General Aristo Co. . .	2,500,000	2,500,000	. . .
Havana Commercial Co. . .	7,500,000	12,500,000	. . .
Havana-American Co. . .	3,000,000	7,000,000	. . .
International Power Co. . .	600,000	7,400,000	. . .
" Steam Pump Co. .	12,500,000	15,000,000	. . .
" Car Wheel Co. .	5,000,000	10,000,000	. . .
" Automobile & Vehi cle Tire Co. . .	1,500,000	1,500,000	. . .
^d Kentucky Distilleries & Warehouse Co. . .	12,000,000	20,000,000	. . .
Keystone Watch Case Co. . .	2,200,000	1,100,000	. . .
Monongahela River Consolidated Coal & Coke Co. . .	10,000,000	20,000,000	10,000,000
Mt. Vernon Woodbury Cotton Duck Co. . .		9,500,000	14,000,000
National Carbon Co. . .	4,500,000	5,500,000	. . .
National Enameling & Stamping Co. .	10,000,000	20,000,000	. . .
" Steel Co. . .	27,000,000	32,000,000	<i>u</i> 2,561,000
" Salt Co. . .	5,000,000	7,000,000	. . .
" Tube Co. . .	40,000,000	40,000,000	. . .
" Glass Co. . .		4,000,000	2,000,000
New England Cotton Yarn Co. .	6,500,000	5,000,000	5,700,000
Niles-Bement-Pond Co. . .	3,000,000	5,000,000	. . .
Pressed Steel Car Co. . .	12,500,000	12,500,000	. . .
Pacific American Fisheries Co. .		5,000,000	. . .
" Coast Biscuit Co. .	1,500,000	2,500,000	1,500,000
^e Pullman Co. . .		74,000,000	. . .
Paterson Brewing & Malting Co. .		3,000,000	. . .
Pittsburg Stove & Range Co. .	1,000,000	1,000,000	. . .
Pittsburg Coal Co. . .	32,000,000	32,000,000	. . .

4, This Company in 1901 issued \$4,000,000 more bonds.

e, Date of consolidation with Wagner Co.

<i>Year when Incorporated.</i>	AUTHORIZED CAPITALIZATION.		
	<i>Preferred.</i>	<i>Common.</i>	<i>Bonds.</i>
1899.—Continued.			
Pittsburg Brewing Co.	\$6,500,000	\$6,500,000	\$6,500,000
Rubber Goods Manufacturing Co.	25,000,000	25,000,000	. . .
Royal Baking Powder Co. . . .	10,000,000	10,000,000	. . .
Republic Iron & Steel Co. . . .	25,000,000	30,000,000	. . .
Rochester Optical & Camera Co. . . .	. . .	3,500,000	. . .
Seacoast Packing Co. . . .	3,000,000	5,000,000	. . .
Standard Sanitary Mfg. Co. . . .	2,500,000	2,500,000	2,500,000
“ Phosphate & Fertilizer Co.	400,000	600,000	. . .
Sloss-Sheffield Steel & Iron Co. .	10,000,000	10,000,000	u 3,835,000
Springfield (Mass.) Breweries Co.	1,150,000	1,150,000	1,150,000
Standard Shoe Machinery Co. .	2,000,000	3,000,000	. . .
Union Bag & Paper Co. . . .	11,000,000	16,000,000	. . .
U. S. Cast Iron Pipe & Foundry Co.	15,000,000	15,000,000	. . .
United Fruit Co. . . . .	. . .	20,000,000	. . .
rd United States Flour Milling Co.	12,500,000	12,500,000	15,000,000
d United Starch Co. . . .	2,500,000	3,500,000	. . .
United Shoe Machinery Co. . .	12,500,000	12,500,000	. . .
United States Finishing Co. . .	2,000,000	1,000,000	1,750,000
“ “ Bobbin & Shuttle Co.	950,000	1,050,000	. . .
Virginia Iron, Coal & Coke Co. . . .	. . .	10,000,000	10,000,000
Total . . .	\$726,150,000	\$1,188,750,000	\$162,395,000
Deduct duplicates . . .	12,800,000	21,000,000	. . .
Net Total . . .	\$713,350,000	\$1,167,750,000	\$162,395,000
INCREASES.			
American Tobacco Co.	\$. . .	\$35,000,000	\$. . .
“ Malting Co. . . .	. . .	. . .	5,000,000
Continental Tobacco Co. . . .	12,500,000	12,500,000	. . .
Colorado Fuel & Iron Co. . . .	. . .	12,000,000	. . .
Diamond Match Co. . . . .	. . .	4,000,000	. . .
Electric Storage Battery Co. . . .	. . .	4,500,000	. . .
National Casket Co. . . . .	. . .	3,000,000	. . .
Standard Oil Co. of N. J. . . .	. . .	100,000,000	. . .
Virginia-Carolina Chemical Co. . .	6,000,000	6,000,000	. . .
Total increases	\$18,500,000	\$177,000,000	\$5,000,000
Grand Total, 1899	\$731,850,000	\$1,344,750,000	\$167,395,000

6 This deduction is made here because in this year the American Saddle Co. was absorbed by the American Bicycle Co., and the Kentucky Distilleries & Warehouse Co. by the Distilling Co. of America.

Year when Incorporated.	AUTHORIZED CAPITALIZATION.		
	Preferred.	Common.	Bonds.
1900.			
American Caramel Co.	\$1,000,000	\$1,000,000	\$600,000
“ Bridge Co.	35,000,000	35,000,000	. . .
“ Sheet Steel Co.	26,000,000	26,000,000	. . .
“ Clay Manufacturing Co. . . . .	. . .	10,000,000	2,500,000
“ Loom Co. . . . .	. . .	1,000,000	. . .
“ Snuff Co.	12,500,000	12,500,000	. . .
“ Sash & Door Co.	2,500,000	3,500,000	. . .
“ Rice Growers' Distribu- tive Co.	1,000,000	14,000,000	. . .
Buffalo Union Furnace Co.	200,000	1,000,000	300,000
Carnegie Company . . . . .	. . .	160,000,000	160,000,000
Crucible Steel Company of America.	25,000,000	25,000,000	. . .
Consolidated Railway Electric Car Lighting & Equipment Co. . . . .	. . .	16,000,000	. . .
Consolidated Lime Co.	1,500,000	1,500,000	. . .
Continental Gin Co. . . . .	. . .	3,000,000	. . .
Compressed Air Co.	755,000	7,245,000	500,000
Delta Cotton Oil Co. . . . .	. . .	1,000,000	. . .
Fisheries Co.	2,000,000	1,000,000	500,000
Flint, Eddy & American Trading Co.	2,000,000	2,000,000	. . .
Herring-Hall-Marvin Co.	b 1,650,000	1,650,000	. . .
Illinois Brick Co.	4,000,000	5,000,000	. . .
International Fire Engine Co.	4,000,000	5,000,000	. . .
g “ Crude Rubber Co.	10,000,000	20,000,000	. . .
“ Emery & Corundum Co. . . . .	. . .	2,000,000	500,000
Jones & Laughlins . . . . .	. . .	20,000,000	. . .
Magnus Metal Co.	1,500,000	1,500,000	. . .
National Sugar Refining Co.	10,000,000	10,000,000	. . .
“ Asphalt Co.	10,000,000	12,000,000	6,000,000
“ Starch Co.	4,500,000	5,000,000	8,000,000
New England Brick Co.	3,000,000	2,000,000	850,000
National Roofing & Corrugating Co. . . . .	. . .	5,000,000	. . .
“ Leather Co. . . . .	. . .	5,000,000	. . .
“ Fish Co. . . . .	. . .	5,000,000	. . .
New York & Kentucky Co.	1,000,000	1,000,000	. . .
Pittsburg Valve, Foundry & Con- struction Co. . . . .	. . .	1,100,000	. . .
Pratt & Whitney Co.	1,225,000	1,525,000	. . .
Rocky Mountain Paper Co.	600,000	750,000	. . .

e, Date of consolidation, not of incorporation; g, company incorporated, organization pending.

Year when Incorporated.	AUTHORIZED CAPITALIZATION.		
	Stock.		
	Preferred.	Common.	Bonds.
1909.—Continued.			
Standard Milling Co. . . .	\$6,900,000	\$4,600,000	\$5,750,000
“ Chain Co. . . .	1,500,000	1,500,000	700,000
Shelby Steel Tube Co. . . .	6,000,000	9,000,000	· · ·
United Metals Selling Co. . . .	· · ·	5,000,000	· · ·
Union Talc Co. . . .	· · ·	1,000,000	600,000
Welsbach Co. . . .	· · ·	3,500,000	7,000,000
Total . . .	\$175,330,000	\$448,870,000	\$193,800,000
Pure Oil Co. (increase) . . .	2,000,000	7,000,000	· · ·
General Electric Co. (increase) . . .	· · ·	4,415,000	· · ·
Grand Total, 1900, . . .	\$177,330,000	\$460,285,000	\$193,800,000
Total Entire Period. . . .	\$1,530,927,000	\$3,264,782,100	\$573,095,000
Duplicates and Reductions . . .	117,025,800	719,635,600	89,000,000
Grand Net Total, . . .	\$1,413,901,200	\$2,545,146,500	\$484,095,000

The following summary shows the total capitalization year by year, together with the average capitalization per company for each year and for the entire period. In arriving at the per company capitalization, duplicates have been included and increases and reductions in capital excluded. This will be found entirely proper. For instance, the National Lead Trust in reorganization reduced its capital from \$90,000,000 to \$30,000,000. The new company should of course be included in any compilation intended to show the average capitalization for that year, while the reduction should not be allowed for but considered in the final net total. There is perhaps some inaccuracy in including in the total capitalization for a given year companies which are merely reorganizations of others previously appearing in the list, but as the capitalization is frequently changed in reorganization, it has been deemed best in the interest of clearness to take no notice of such duplication in any one year, but to deduct it from the total for the entire period. But when a complete duplication appears in any one year, as in 1899 when the Kentucky

Distilleries & Warehouse Company and the American Saddle Company were organized and later consolidated into larger companies in the same year, duplication has been allowed for in that year.

Year.	Number Companies.	Total Capitalization, Stock and Bonds.	<i>i</i> Average Capitalization Per Company.
1887	8	\$216,226,000	\$27,025,000
1888	3	23,600,000	7,867,000
1889	12	152,179,600	12,682,000
1890	13	155,156,500	11,935,000
1891	17	166,200,000	9,070,000
1892	10	193,412,000	16,800,000
1893	6	239,015,000	39,856,000
1894	2	30,400,000	13,700,000
1895	6	107,255,000	17,542,000
1896	5	49,850,000	8,970,000
1897	4	81,000,000	20,250,000
1898	20	708,600,000	34,662,000
1899	87	2,243,995,000	23,877,000
1900	42	831,415,000	19,500,000
Total.....	235	\$5,198,304,100	<i>h</i> 20,900,000
Previous to 1887		170,500,000	
Grand total for all years.....		\$5,368,804,100	
Deduct reductions and duplications.....		925,661,400	
Grand net total entire period...		\$4,443,142,700	

h Average for 14 years.

i The apparent discrepancy in these figures is explained above.

These comparisons are presented more forcibly in the accompanying charts.

A glance at the chart (No. 1) shows at once that the year 1899 was an extremely abnormal one in the consolidation movement. The movement in that year, in fact developed into a craze on the part of greedy promoters and vendors to unload properties upon the public at enormous prices. The figures for 1899, moreover, huge as they are, do not fully measure the proportions of industrial consolidation in that year. In addition to the companies shown, other projects amounting roughly in proposed capitalization to over one

billion dollars were undertaken and carried to advanced stages, later, however, to be abandoned.

Dismissing the year 1899 for the moment and turning to the earlier years covered by the tables, it will be seen that for the first seven years there was little special feature to the consolidation movement, except in 1888, when it suffered a sharp check, probably owing to the fact that the presidential election occurred in that year, exercising a deterring influence upon such ventures. This cause did not apparently have much effect in 1892, a circumstance which may perhaps be accounted for in part by the general overconfidence that President Harrison would be re-elected, thus ensuring a continuance of the same administration policy that had prevailed the previous four years. In 1894 there were almost no consolidations formed, the organization of the Carnegie Steel Company Ltd., being hardly entitled to inclusion in the list. For this the panic of 1893 may be held directly accountable. At a time when payments in Wall Street were made in Clearing House certificates instead of in cash, it would have been worse than ridiculous for a promoter to ask a banker to finance an "industrial proposition," the more so because in the minds of some the failure of the notorious Cordage "Trust" was regarded as one of the acute factors which precipitated that panic. It may be asked why this effect was not shown in 1893. The answer is that most of the consolidations of 1893 were formed before the panic. It should, moreover, be borne in mind that the organization of a large consolidation is not the work of a day, but that its incorporation usually follows months of preliminary work, so that the key to the movement in any given year, as shown by the figures, may often be found in the conditions prevailing in the preceding year.

Coming down to the year 1895, the table shows that the consolidation movement recovered somewhat from the check received in 1893, but in 1896 it was again interrupted, owing

no doubt, to the scare over Bryanism and free silver, attending the presidential election in that year. The small total in 1897 is probably due to the fact that conditions in 1896 did not favor the initiation of consolidation projects. In 1898, however, the movement made an abnormal advance, which, as already seen, became phenomenal in 1899. The sharp decline in 1900 was largely in the nature of a reaction from the excess to which the movement had been carried in the previous year. The stock market was so overloaded with new industrial securities in 1899 that promoters found great difficulty in the latter part of that year and in 1900 in inducing either bankers or the public to take up new flotations. The recurrence of another presidential election may also be again credited as a factor, but the chief influence was the difficulty in securing financial assistance for such schemes.

It would be interesting if some definite connection could be established between the course of the consolidation movement and general business conditions, with special reference to the factor of competition. That the suppression of competition or at least its regulation is one of the chief objects aimed at in consolidation is so obvious as to require no argument. Whether consolidation has been forced by competition, as has often been asserted, is another matter. Unfortunately the causes entering into the problem are so numerous that it is difficult to discuss any one separately. The period covered by the table, moreover, is probably too short to permit of the deduction of general laws with any degree of safety. It is at once evident, however, that years of abnormal depression, such as 1893 and 1896, are highly unfavorable to the organization of consolidations. On the other hand, the general high degree of prosperity in the latter part of 1899 inclined many manufacturers to retain the control of their business rather than accept consolidation proposals, and to some extent interfered with consolidation progress. In a general way, bearing in mind that the causes operating

in a given year may not be immediately reflected, it appears that periods when competition is extremely keen but before it has reached the point of extreme depression or panic are particularly calculated to encourage consolidation plans. This would agree fairly well with the figures given for the early nineties and also for those of 1899. There is no doubt, therefore, that competition is one of the important elements entering into the causes of industrial consolidation. On the other hand, the desire of securing inordinate profits by the sale of watered stock has played no small part in the movement.

The figures of average yearly capitalization per company (see chart No. 2) show at once that there has been no uniform tendency in this respect. On the contrary, the average has varied with much irregularity. It is not safe at once to jump to the conclusion that the years in which the average is largest are those when over-capitalization, which is unfortunately characteristic of the industrial consolidation movement as a whole, was most severe. The amount of capitalization, in other words, does not measure the amount of over-capitalization. There was far more over-capitalization in the American Fisheries Company, with \$10,000,000 of stock, than in the Standard Oil Company with \$100,000,000. The fact that in some years only a small number of companies were formed also tends to lower the value of the averages for purposes of comparison. It may, however, be worth noting that of the companies formed in 1893, when the average capitalization reached the highest point, the three largest, *viz.*, the United States Leather Company, the United States Cordage Company, and the Union Typewriter Company, were anything but conspicuous successes. The Leather "Trust" is now heavily in arrears upon its preferred stock dividends, and the same was until recently true of the Union Typewriter Company (which is now in more prosperous condition), while the history of the Cordage consolidation is too dismal to require mention. Of the companies organized in 1898, when the

average capitalization was also exceptionally high, four, or twenty per cent of the total number, have been notably unsuccessful. These are the American Linseed, the American Fisheries, the International Silver and the National Shear companies. It is only fair to say that the average in 1898 was brought up considerably by the fact that the total \$200,000,000 authorized capitalization of the Federal Steel Company is used, while only about half that amount is issued. Using the issued capitalization of that company, the average for the year would be brought down to about \$31,224,000. On the other hand, it does not appear that those companies formed when the average capitalization is lowest have been especially successful. Of the thirteen formed in 1890, four were later forced to go through the process of reorganization, and several of those incorporated in 1888 and 1896, when the average was also low, have made unsatisfactory showings.

In the years 1899 and 1900 the decline in average capitalization probably does indicate a certain amount of reduction in over-capitalization. The unwillingness of the public to take up industrial securities in the latter part of 1899 made bankers more cautious about financing such companies, and as a result promoters were in several cases forced to cut down their plans for capitalization. If, moreover, in arriving at the average for 1900, the Carnegie Company, with its unusually large capitalization of \$320,000,000 (including bonds) is excluded, the average per company is brought down to about \$14,500,000.

It appears, therefore, that figures of average capitalization should be used only with great caution in judging the merits of companies formed in any given year, but they are not without value.

It may be worth passing mention that the organization of industrial consolidations is largely effected in the early months of the year. An analysis on this point of the 164

companies formed since 1894 shows that the dates of incorporation are distributed as follows:—

<i>Number incorporated in</i>			<i>Number incorporated in</i>				
January	.	.	17	July	.	.	14
February	.	.	14	August	.	.	14
March	.	.	25	September	.	.	10
April	.	.	17	October	.	.	6
May	.	.	10	November	.	.	8
June	.	.	20	December	.	.	9
Total six months,			103	Total six months,			61

The same comparison is shown more graphically by Chart No. 3.

The distribution by months is easily explained. A large majority of these companies are financed in New York, and it is usually in the early months of the year that New York bank reserves accumulate and money becomes cheap or at least that interest rates work lower. This is a highly important consideration. Although the organization of these consolidations has been effected largely on a stock basis, a considerable amount of money is needed to provide working capital or to purchase outright plants that can be secured only for cash. When in the late spring of 1899 rates for money in New York advanced sharply, a decided check was given to the consolidation movement and many projects apparently on the eve of successful consummation were suddenly shelved, in many cases to be abandoned completely. The rather large number of charters taken out in June, July and August represents in part the completion of plans undertaken earlier in the year. The mid-summer months are unsuited for the organization of large corporations not only on account of the weather but because the vacation season finds many of those interested in such deals widely separated. In consequence, comparatively few companies are brought out in the late months of the year. New enterprises are, however, undertaken in those months which reach completion later.

The tariff has of course often been held responsible for the "Trusts." On this point the compilation gives little information of value. During the greater part of the period under consideration relatively high duties have been in force, while in the period covered by the lower so-called Wilson Tariff, other causes were at work which would in themselves account for the decreased activity in those years. To those who see in the tariff the chief cause of consolidation, it may be remarked that the protective policy was in effect for a score of years before the organization of "Trusts" attracted attention, while in Great Britain with its "Free Trade" policy, the organization of similar consolidations has also reached large proportions. It is not intended to assert that the tariff has had no influence upon industrial organization. This question, however, involves an argument of the "Trust" problem as a whole, which is not within the scope of this article.

To summarize briefly: It is admitted that competition has been one of the most active factors in the creation of trusts. On the other hand, the movement has been largely affected by the opportunity for disposing of the securities such corporations. The law of supply and demand has a direct application. Had the public continued in 1900 to purchase such securities with the same readiness they showed in 1899, there is little reason to doubt that the movement would have suffered no setback. It cannot be insisted too strongly, therefore, that those who contend that competition is entirely responsible for industrial consolidation ignore a factor of great if not of equal importance.

The compilation has been brought down only to the close of 1900. As this article is going to press, negotiations are nearing completion for the consolidation of nine¹ large com-

¹ NOTE.—These nine companies are: Carnegie Co., Lake Superior Consolidated Iron Mines, Federal Steel Co., American Steel & Wire Co., National Tube Co., National Steel Co., American Tin Plate Co., American Steel Hoop Co., and American Sheet Steel Co.

panies above named into a single concern, styled the United States Steel Corporation, with a stock capitalization of what will probably be nearly one billion dollars, and a bond issue of over \$300,000,000. While on account of the duplication noted, this company would add comparatively little to the net total of capital for the period, it would materially affect the figures of average capitalization per company were the table brought down to cover the current year. It may be worth noting that this "consolidating of consolidations," which is already indicated in the compilation, bids fair to become more frequent in future with, of course, an accompanying increase in average capitalization.

APPENDIX A.

In order to avoid burdening the table further with footnotes the following explanation of the duplications has been prepared. The year in which the reference first occurs is given at the left:—

Previous to 1887.—Standard Oil Trust succeeded in 1900 by Standard Oil Co. of New Jersey. American Cotton Oil Trust succeeded in 1889 by American Cotton Oil Co. National Linseed Oil Trust succeeded by company same name in 1887. Absorbed by American Linseed Co. in 1898.

1887.—National Cordage Co. succeeded in 1893 by United States Cordage Co. which reorganized in 1896 as Standard Rope & Twine Co. Sugar Refineries, succeeded in 1891 by American Sugar Refining Co. National Lead Trust succeeded by National Lead Co. in 1891. Distilling & Cattle Feeding Trust succeeded by company same name 1890, reorganized as American Spirits Mfg. Co. (1895), which with Manhattan Spirit Co. (1893), Spirits Distributing Co. (1896), Standard Distilling & Distributing Co. (1898), and Kentucky Distilleries & Warehouse Co. (1899) were in 1899 consolidated as the Distilling Company of America.

1889.—Illinois Steel Co. absorbed by Federal Steel Co. in 1898.

1890.—American Biscuit & Mfg. Co., New York Biscuit Co., United States Baking Co. absorbed by National Biscuit Co. in 1898. National Starch Mfg. Co. absorbed by National Starch Co. in 1900. Distilling & Cattle Feeding Co. (see above under 1887).

1891.— Consolidated Steel & Wire Co. absorbed by American Steel & Wire Co. of Illinois in 1898, later merged in American Steel & Wire Co. of N. J. in 1899. National Tube Works Co. acquired by National Tube Co. in 1899.

1892.— Hecker-Jones-Jewell-Milling Co. acquired in 1899 by United States Flour Milling Co. (which see). Herring-Hall-Marvin Co. reorganized in 1900. Michigan Peninsular Car Co. absorbed by American Car & Foundry Co. in 1899.

1893.— Manhattan Spirit Co. (see above under 1887). United States Cordage Co. reorganized as Standard Rope & Twine Co. in 1896.

1894.— Carnegie Steel Co. purchased by Carnegie Company in 1900.

1895.— American Spirits Mfg. Co. (see above under 1887). Consolidated Ice Co. acquired by American Ice Co. in 1899. Welsbach Commercial Co. acquired by Welsbach Co. in 1900.

1896.— Spirits Distributing Co. (see above under 1887).

1897.— Shelby Tube Co. acquired by Shelby Tube Co. in 1900.

1898.— American Fisheries Co. reorganized as the Fisheries Co. in 1900. Atlantic Snuff Co. purchased by American Snuff Co. in 1900. Standard Distilling & Distributing Co. (see above under 1887). Union Tobacco Co. purchased by American Tobacco Co. in 1899.

1899.— American Saddle Co. purchased same year by American Bicycle Co. Asphalt Co. of America acquired by National Asphalt Co. in 1900. Columbia Electric Car Lighting & Brake Co. acquired by Consolidated Railway Electric Car Lighting & Equipment Co. in 1900. Kentucky Distilleries & Warehouse Co. absorbed same year by Distilling Co. of America. United States Flour Milling Co. reorganized as Standard Milling Co. in 1900. United Starch Co. acquired by National Starch Co. in 1900.

APPENDIX B.—REDUCTIONS IN CAPITALIZATION.

Date of incorporation.

1887.— Southern Cotton Oil Co. reduced to \$2,000,000 in 1895. National Lead Trust reorganized in 1891 with \$30,000,000 capital.

1889.— Consolidated Car Heating Co. reduced to \$1,250,000 in 1893.

1891.— American Lithographic Co. reduced to \$4,000,000 in 1896. National Rice Milling Co. reduced to \$1,500,000 in 1900.

1892.— American Typefounders Co. reduced in 1896 to \$4,000,000 General Electric Co. reduced in 1898 to \$2,551,200 preferred, and \$18,276,000 common stock.

1898.— American Fisheries Co. (see Fisheries Co., 1900).

NOTE.— The change from the "trust" form of organization to the corporate, made by several trusts early in the nineties, was due to court decisions holding the earlier form illegal.

\$2300

2000

1500

1000

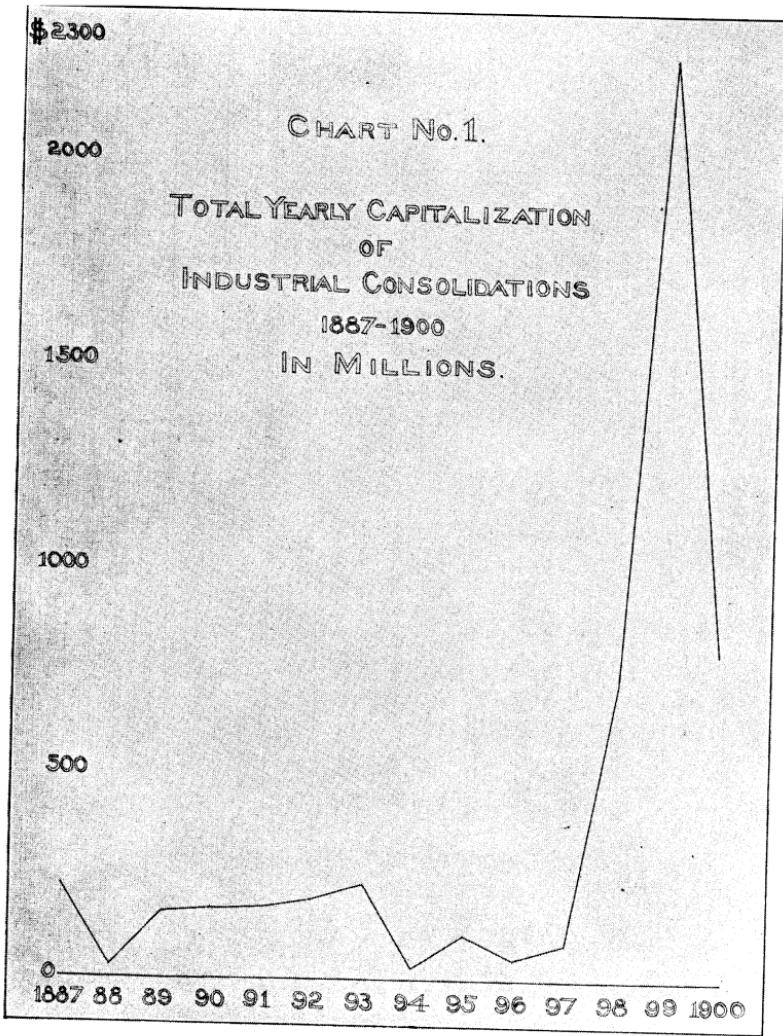
500

0

CHART No.1.

TOTAL YEARLY CAPITALIZATION
OF
INDUSTRIAL CONSOLIDATIONS
1887-1900
IN MILLIONS.

1887 88 89 90 91 92 93 94 95 96 97 98 99 1900



AVERAGE CAPITALIZATION
IN
MILLIONS OF DOLLARS.

CHART No. 2.

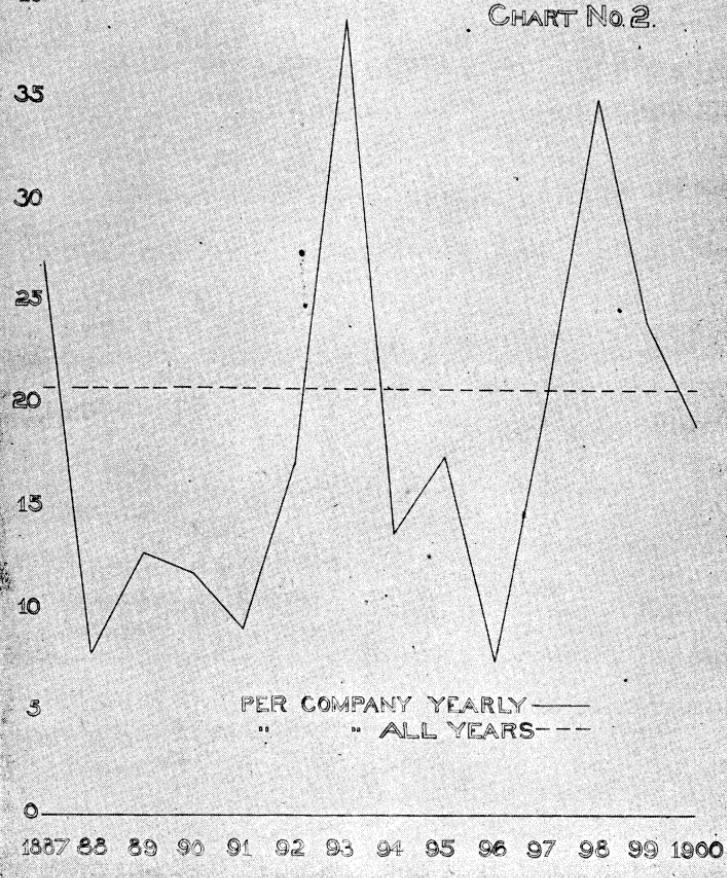


CHART No.3.

DISTRIBUTION OF CONSOLIDATIONS
BY MONTHS OF INCORPORATION
1895-1900.
BOTH INCLUSIVE.

20

15

10

5

0

JAN. FEB. MAR. APR. MAY JUNE JUly AUG. SEPT. OCT. NOV. DEC.